

3. Any carrier seeking to deploy an untested, non-standardized network technology will bear the burden of proving, through testing or experience with limited deployment, that the technology will not cause network interference.⁶⁰

This approach will promote deployment of new xDSL services on a nationwide basis.

Carriers can rely on this approach as an alternative means of gaining approval pending the lengthy Subcommittee review process. These criteria will not subvert the workings of the Subcommittee, but will provide a balance between carriers' needs to deploy innovative xDSL technology and the industry's concerns about spectrum interference and network integrity. Rhythms encourages the Commission to adopt this test as a pro-competitive, and competitively neutral, means of furthering Congress's goals in Section 706 for rapid deployment of advanced services.

C. Commission Involvement is Necessary to Promote Swift and Competitively Neutral Development of xDSL Standards

As DSL services become more prevalent and the importance of spectrum standards increases, there is an increasing potential for some parties to exert disproportionate influence on these groups. Therefore, the Commission should adopt its tentative conclusion that its participation in xDSL standards-setting is necessary and proper on a going-forward basis.⁶¹ By actively participating in the industry standards-setting process, the Commission can intervene where necessary to ensure that the interests of all industry segments are addressed in a balanced fashion.

⁶⁰ *Advanced Services FNPRM* ¶ 68.

⁶¹ *Id.* ¶ 79.

1. ILECs have the economic incentive and ability unilaterally to impose discriminatory and unfounded xDSL standards on their DSL competitors

As the Commission has recognized, the standards-setting process is vulnerable to an imbalance of power in which a “party or groups of parties presum[e] to have greater weight or ‘veto’ power.”⁶² Of any parties, the ILECs pose the greatest danger of presuming dominance because they have the position, resources, and incentive to do so. The Commission’s participation and oversight in the xDSL standards process is thus necessary to keep a competitively neutral balance among the DSL industry’s representatives.

ILECs remain the local monopolist with final control over the development and deployment of xDSL services within their networks. As the sole source of local copper loops, ILECs have bottleneck control over this input and the way it which it is provisioned. Their position enables the ILECs to engage in discriminatory standards-setting with respect to CLEC use of the network. This potential is the most grave in the case of setting spectrum requirements for xDSL technology.

In addition, ILECs are presently entering the retail DSL marketplace on the heels of DSL providers such as Rhythms, NorthPoint and Covad. Their desire to create a strong presence in the DSL market is an incentive for ILECs to hold back the DSL deployment of their competitors until the ILECs’ services gain a foothold. This incentive, together with their ultimate control over the local network, create the dangerous potential for ILECs unilaterally to set discriminatory xDSL spectrum requirements.

⁶² *Advanced Services FNPRM* ¶ 79.

For example, Bell Atlantic (“BA”) has issued its own Technical Reference on Spectrum Management for Unbundled Loops.⁶³ This Technical Reference concerns all metallic loops deployed in BA’s network. In this document, BA states that it retains authority to oversee every metallic loop in its network “to minimize the potential for interference between unbundled loops and embedded and known future services or technologies[.]”⁶⁴ According to its authority, BA states that “[c]ustomers and CLECs that connect equipment to BA unbundled loops shall conform to the terms and conditions in BA tariffs and contracts as well as the requirements in the technical references identified in this document.”⁶⁵ This document is not sponsored by Bellcore or any national standards-body; it is BA’s own unilateral creation. And though the Commission has held that ILECs may not draft or enforce their own parochial xDSL technical standards, clearly BA intends to enforce this one.

As Rhythms explains in the following section, industry standards-setting bodies are not blind to the spectrum issues that xDSL raise. As the Commission recognizes, these issues should not be addressed by ILECs unilaterally,⁶⁶ but by a fairly-balanced industry committee, such as T1E1.4, that will remain competitively neutral with the Commission’s participation. In fact, ILECs must not set spectrum rules even for the interim, as Bell Atlantic and others are now attempting to do,⁶⁷ because such measures are unnecessary and will only create confusion and a lack of uniformity in spectrum standards. There is not, as Rhythms has explained, “an interim

⁶³ Hereinafter “BA Technical Reference,” attached hereto as Exhibit C. Other ILECs, including SBC, have issued final or draft technical publications that purport to establish ILEC-specific technical standards for xDSL loops.

⁶⁴ BA Technical Reference 1.06, Exhibit C at 4.

⁶⁵ *Id.* 1.13, Exhibit C at 5.

⁶⁶ *Advanced Services FNPRM* ¶ 70-71. Some ILECs, including SBC, use the term “Selective Feeder Separation,” or “SFS,” to refer to the same activity. Rhythms, for purposes of clarity, will simply use “BGM.”

⁶⁷ Bell Atlantic-New York defends its xDSL spectrum management policies in its Joint Supplemental Reply Affidavit, filed May 5, 1999 with the New York Public Service Commission in its Section 271 case. Excerpts attached hereto as Exhibit D.

void of industry standards in the area of spectrum management”⁶⁸ that warrants Bell Atlantic, or any other ILEC, to set unilateral xDSL spectrum rules. The Commission should therefore reiterate its conclusion to prohibit ILEC standards-setting and the need for a uniform national spectrum management regime.⁶⁹

2. “Binder Group Management” is an unnecessary practice that enables ILECs to limit choice in types of xDSL technology and xDSL carriers

Left to their own devices, some ILECs have implemented so-called “binder group management” or “BGM,”⁷⁰ which is generally employed in a pernicious manner as a means for ILECs to limit consumer choice of xDSL services and preserve priority for their own ADSL deployment. BGM allows ILECs to segregate xDSL-ready copper loops for use only for ADSL services, thus limiting or possibly precluding CLECs from deploying other xDSL technologies over those loops. This “management” is, however, unnecessary and is contrary to industry standards-setting efforts and must be precluded by the Commission. BGM is not a means of preserving the network, it is only a means of preserving ILEC telecommunications monopolies.

ADSL, IDSL and HDSL technologies have already developed according to the strict specifications of T1E1.4 spectrum standards.⁷¹ These standards expressly address issues of crosstalk, attenuation and transmission power. These engineering issues have been foremost in the minds of telecommunications experts since the first modern data standard, ISDN, was developed.⁷² As succeeding technologies, such as HDSL, ADSL, and others, were envisioned,

⁶⁸ Bell Atlantic-New York Joint Supplemental Reply Affidavit, Exhibit D at 40.

⁶⁹ *Advanced Services FNPRM* ¶ 71.

⁷⁰ The Commission seeks comment on “the development of xDSL binder group administration practices[.]” *Advanced Services FNPRM* ¶ 86.

⁷¹ The following national xDSL standards have been approved: T1.601 (Basic Rate ISDN/IDSL), TR28 (HDSL) and T1.413 (ADSL).

⁷² ISDN was echo-cancelled to limit the frequency spectrum used. Care was taken to ensure operation and spectral compatibility in the presence of legacy services such as POTS, DDS, switched 56 kb/s service, self NEXT, and adjacent binder T-1.

the standards were again developed to be spectrally compatible with existing services assuming a “worst case” deployment in the presence of a maximum of potentially “disturbing” technologies. Line coding, power levels, spectral shaping, and other tools were used to assist in managing compatibility with other technologies in the same pair range.⁷³ To ensure compatibility, long loops were defined with demanding crosstalk scenarios. In order to meet T1E1.4 standards, the technology must be able to perform to the standards based on the assumption they are operating in these “worst case” environments. Therefore, with respect to each of the spectral interference issues raised by the Commission,⁷⁴ the present technologies already have been *designed* to operate in the presence of crosstalk, interference and the presence of other noise.

With these industry standards in place, it is evident that ILECs’ BGM version of spectrum management is wholly unwarranted. DSL services are minimal network disturbers, if at all, and need not be segregated or specially managed by the ILECs to preserve network integrity. In fact, the only spectrum that is truly necessary is the segregation of AMI T-1s, recognized by the Commission as the most egregious network disturbers,⁷⁵ via separation of transmit and receive pairs and placement of such pairs on the perimeter of the feeder cable, if possible. The Commission should not endorse or engage in any more extensive BGM practices for xDSL services than this.

BGM involves the manipulation of xDSL loops and POTS loops into discrete pair ranges, typically of 25 or 50 twisted pair, with designated places within the feeder cable reserved for different technologies. The greatest “disturbers,” as defined by the ILEC, are placed so as to be contiguous with as few other loops as possible. The ILECs, for example SBC, focus on the configuration of the feeder portion of the loop plant when doing this placement. This practice

⁷³ A pair range is a consecutively-numbered series of twisted pairs.

⁷⁴ *Advanced Services FNPRM* ¶ 86.

will, according to the ILECs, prevent crosstalk and other network interference purportedly caused by DSL. Not only is the underlying premise of BGM a fallacy –most xDSL technologies are not disturbers – but the ILECs’ deployment practices show that BGM is both unhelpful and likely impossible to maintain.

ILECs have never sought to inventory the copper pairs installed in the loop plant on the basis of “binder cables.” ILECs do not keep loop records in terms of “binder cables,” but only according to their feeder cable and pair number. In addition, it is rare if not impossible that ILECs are able to employ BGM such that their loop databases always indicate which loops are in which “binder cables.” In its own Technical Reference, BA admits that

Since existing cable records and operational support systems cannot determine the amount of exposure between any two pairs of a multi-pair cable, and since the integrity of any particular binder group between the CO and the cable terminal serving the End-User location cannot be assured, time consuming manual studies of cable records are not always successful in locating a fully compatible cable pair.⁷⁶

This concession demonstrates that BGM is not helpful for maintaining information about loops within the network. Indeed, ILEC Operational Support Systems (“OSS”), and specifically their Loop Facilities Assignment Control System (“LFACS”)⁷⁷ database systems are not based on the location of “binder cables” – they track pair ranges. BGM will thus not accomplish what the ILECs purport to do. Thus, industry standards and actual ILEC deployment practices reveal that ILEC BGM is simply an anticompetitive and discriminatory practice meant to limit CLEC deployment of xDSL services.

Essentially, BGM is inextricably tied to the ILECs’ rollout strategy, wherein the ILEC readies its own copper loops for xDSL services and sets them aside for their own use. To avoid

⁷⁵ *Advanced Services Order* ¶ 74.

⁷⁶ BA Technical Reference 4.03, Exhibit C at 23.

⁷⁷ This is one example of a loop information database; other carriers use different terms.

the 1996 Act's requirement that ILECs provide CLECs with nondiscriminatory access to these loops, ILECs segregate these xDSL loops in "special" feeder cable that allegedly are properly engineered with the correct number of POTS and xDSL loops to prevent spectrum interference.⁷⁸ Coincidentally, the feeder cables hold exactly the types and numbers of xDSL loops that the ILECs require for their own services, leaving nothing available for competing data CLECs. This scheme, in the ILECs' minds, gives them the power to deny loops lawfully on grounds that there remain no other technically feasible loops.

If ILECs are permitted to continue to enforce BGM policies, xDSL competition and development will come to a standstill. Commission involvement in standards-setting will not prevent this anticompetitive behavior. Rather, the Commission should adopt rules that prohibit or severely limit the ILECs' ability to create and enforce BGM policies.

3. ILECs require only minimum information regarding DSL competitors' service for purposes of network administration

Rhythms does not mean to imply that ILECs have no right to gather information about the technical aspects of the services deployed contiguously or within their networks. Nothing in the 1996 Act or Commission rules intends to abrogate ILEC administration of the network entirely. The amount of DSL-related information ILECs truly need for this purpose, however, is not as substantial as the ILECs assert.

For example, Bell Atlantic's Technical Reference states that CLECs must "perform a spectral compatibility analysis for all technologies that the CLEC proposes to use with BA unbundled loops."⁷⁹ In addition, Bell Atlantic requires CLECs to submit a Bona Fide Request, which always invites a lengthy and complicated process, when ordering a type of loop that Bell

⁷⁸ In an internal side-note within the BA Technical Reference, a BA engineer admits that "[c]ompatibility in the same cable will ensure compatibility in adjacent cables but we don't need to say it." BA Technical Reference 1.04, Exhibit C at 4.

Atlantic itself does not yet recognize.⁸⁰ This requirement is unnecessary and will only cause great delay in development of DSL services. ANSI has already issued PSD masks for ADSL, HDSL and IDSL; it is in the process of developing PSD masks for various speeds of SDSL. CLECs should be required only to inform Bell Atlantic, or any ILEC, which PSD mask applies to the CLEC's proposed service. At a maximum, CLECs may be required to inform Bell Atlantic of the "flavor," or type of xDSL that the CLEC will use over a BA copper loop, so long as CLECs may change the type of xDSL service without charge or delay. ILECs do not need to know the speed or power at which the particular DSL will be transmitted, as the PSD mask will cover any possible transmission scenario for the xDSL flavor.

The Commission should be vigilant about ILEC censuses of CLEC DSL services because such information can easily be used anticompetitively to gain proprietary business plan information from the CLEC. That is to say, if an ILEC were to require Rhythms to tell it the type, speed and power of transmission for each loop it uses, the ILEC could use this information to steal the customers that Rhythms will serve. In addition, the ILEC can use this information to preclude Rhythms from particular binder groups unnecessarily, alleging that the Rhythms service somehow will cause harmful interference to ILEC services or that no binder group has capacity for that particular kind of service. Indeed, it is difficult to determine any use for detailed CLEC information that would not serve these anticompetitive purposes.

Therefore, the Commission should conclude that ILECs cannot requisition excessive service information from DSL competitors for purposes of spectrum compatibility.

⁷⁹ BA Technical Reference 8.04, Exhibit C at 34.

⁸⁰ *Id.*

CONCLUSION

For all these reasons, the Commission should mandate line sharing between ILEC voice services and CLEC DSL services. Further, the Commission should participate in all industry standards-setting for xDSL technologies and adopt the three-tiered approach for interim approval of such technologies proposed herein.

Respectfully submitted,

RHYTHMS NETCONNECTIONS INC.

By: 

Glenn B. Manishin

Christy C. Kunin

Stephanie A. Joyce

Blumenfeld & Cohen – Technology Law Group

1615 M Street, N.W., Suite 700

Washington, D.C. 20036

202.955.6300

202.955.6460 facsimile

Jeffrey Blumenfeld

Vice President and General Counsel

Rhythms NetConnections Inc.

6933 South Revere Parkway

Englewood, CO 80112

303.476.2222

303.476.5700 facsimile

Attorneys for Rhythms NetConnections Inc.

Dated: June 15, 1999

CERTIFICATE OF SERVICE

I, Leslie LaRose, do hereby certify that on this 15th day of June, 1999, I have served a copy of the foregoing document via messenger, to the following:


Leslie LaRose

Chairman William E. Kennard
Federal Communications Commission
445 12th Street, S.W., Room 8B-201
Washington, D.C. 20554

Commissioner Susan Ness
Federal Communications Commission
445 12th Street, S.W., Room 8B-115
Washington, D.C. 20554

Commissioner Harold Furchtgott-Roth
Federal Communications Commission
445 12th Street, S.W., Room 8A-302
Washington, D.C. 20554

Commissioner Gloria Tristani
Federal Communications Commission
445 12th Street, S.W., Room 8C-302
Washington, D.C. 20554

Commissioner Michael Powell
Federal Communications Commission
445 12th Street, S.W., Room 8A-204
Washington, D.C. 20554

Larry Strickling
Chief, Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W., Room 5C-450
Washington, D.C. 20554

Thomas Power
Legal Advisor, Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W., Room 8B-201
Washington, D.C. 20554

James Casserly
Legal Advisor, Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W., Room 8B-115
Washington, D.C. 20554

Kevin Martin
Legal Advisor, Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W., Room 8A-302
Washington, D.C. 20554

Kyle Dixon
Legal Advisor, Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W., Room 8A-204
Washington, D.C. 20554

Karen Gulick
Legal Advisor, Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W., Room 8C-302
Washington, D.C. 20554

Kathy Brown
Chief of Staff, Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W., Room 8B-201
Washington, D.C. 20554

Robert Atkinson
Deputy Chief, Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W., Room 5-C356
Washington, D.C. 20554

Stacy Priest
Common Carrier Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

ITS
1231 20th Street, N.W.
Washington, D.C. 20036

Exhibit A


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Friday June 4, 1:53 pm Eastern Time

Company Press Release*SOURCE: Rhythms NetConnections Inc.*

Rhythms and MCI WorldCom Complete Unprecedented Voice and Data Over DSL Test

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Proof-of-Concept with Cisco and Jetstream Communications Delivers Voice And Data Access Over DSL-Enabled Standard Phone Line

ENGLEWOOD, Colo., June 4 /PRNewswire/ -- In a ground-breaking test completed this week, Rhythms NetConnections Inc. (Nasdaq: [RTHM](#) - [news](#)), and MCI WorldCom (Nasdaq: [WCOM](#) - [news](#)), in conjunction with Cisco and Jetstream Communications, successfully demonstrated toll-quality voice and high-speed data communication over a DSL-enabled copper phone line in New York City. Together, Rhythms and MCI WorldCom are developing next generation DSL networking solutions, including integrated voice, data, and Internet access and applications. Rhythms is a leading provider of DSL-based, high-performance networking solutions for remote access to private networks and the Internet.

The trial is part of Rhythms' and MCI WorldCom's evaluation of Jetstream's enhanced CPX-1000 gateway designed to handle local voice and data access over DSL. Jetstream is a supplier of broadband access solutions for next-generation local telecommunications networks.

In the demonstration, phone calls and Internet access were delivered simultaneously over a single DSL line. A telephone was plugged into an analog voice port on a Jetstream Integrated Access Device (IAD), while a PC was connected to an Ethernet port on the IAD. The Jetstream IAD was connected via the Cisco 6100 DSL Access Concentrator to Rhythms' DSL network. Voice calls were then transported via Cisco's 8650 BPX IP+ATM switches, through Jetstream's CPX-1000 voice gateway interface with MCI WorldCom's Class 5 PSTN (public switched telephone network) switch over MCI WorldCom's ATM network. Data traffic was transported to the Internet and also could be directed to a corporate LAN.

"This success is a significant advancement in Rhythms' and MCI WorldCom's development of voice and data over DSL," said Jim Greenberg, Chief Network Officer at Rhythms. "This type of solution can address the needs of corporations with remote workers and branch offices that must have high performance, the flexibility of both voice and data capabilities, and cost-effective management to justify outsourcing remote network management."

Voice and data over DSL offers the advantages of DSL connectivity including always-on, high-speed remote access, plus the benefits of multiple local access phone connections over a single copper twisted-pair line. Jetstream's CPX-1000 large-scale voice gateway and IADs support ATM-based DSLAMs, such as the Cisco 6100 Series, DSL Access Concentrators, which are widely deployed throughout Rhythms' network. Voice and data over DSL also provides bandwidth on demand, as when the phones aren't on, the data connection receives all of the bandwidth.

"MCI WorldCom is working with Rhythms to transform DSL from an Internet-only technology to a business critical broadband access method for companies requiring integrated access to a wide variety of enterprise applications," said Brian Brewer, Senior Vice President of Business Marketing at MCI WorldCom.

"Jetstream's IADs and gateway offer innovative competitive local exchange carriers, such as Rhythms and MCI WorldCom, the means to provide customers both high-speed data and traditional voice services that they won't outgrow," said S. 'Sundi' Sundaresh, President and CEO of Jetstream.

"We are pleased to be a part of this ground-breaking test demonstrating voice and data over DSL," said Tim McShane, Director of Marketing for the DSL Business Unit at Cisco. "Voice and data over DSL is an important value-added New World service that will enable leading-edge companies like Rhythms and MCI WorldCom to expand their market penetration and generate additional revenue."

Today's announcement marks a milestone for Rhythms and MCI WorldCom's strategic alliance announced in January. The partnership

http://biz.yahoo.com/prnews/990604/co_rhythms_2.html

was forged based on the promise of jointly developing services that would give customers the cost efficiencies inherent in DSL technology for a wide range of critical networking applications.

Rhythms provides managed network services for business users, based on "always on," high-speed DSL access via local connections ranging in speeds from 128 kbps to 7.1 Mbps (approximately 125 times the speed of today's fastest dial-up modem). Pricing for customers is based on integrated pricing for leased, fully managed networks and includes configuration, installation, equipment and network management. Because the Rhythms network design requires no equipment purchase by the user and optimizes both local and wide area network capacities, the acquisition price for customers is generally 30 to 50 percent less than other high-speed services.

About Cisco Systems

Cisco Systems, Inc. (Nasdaq: [CSCO](#) - [news](#)) is the worldwide leader in networking for the Internet. News and information are available at <http://www.cisco.com>.

About Jetstream VoDSL

Jetstream's VoDSL broadband access solution enables ICPs to deliver multi-line local telephone service and high-speed data services over packet-based DSL access networks. It consists of three components. The first, the CPX-1000, is a large-scale voice gateway that resides in a carrier's regional switching center and serves as a bridge between a Class 5 voice switch and a DSL access network. The second component is a family of integrated access devices (IADs) provided by Jetstream and its partner companies. IADs connect to a DSL line at subscriber premises and deliver 16 or more telephone lines and continuous high-speed Internet or remote LAN access. The last component, Jet-EMS, is a carrier-class element management system enabling rapid deployments of large scale VoDSL networks.

About Jetstream Communications

Jetstream Communications Inc., the leader in Voice over DSL solutions, develops, manufactures, and markets broadband access products for next generation local telecommunications networks. Jetstream's products are rapidly becoming the standard for integrated voice and data service delivery to the small business and high-end residential communications markets. Based in Los Gatos, California, Jetstream is a privately held, venture-backed company led by a seasoned management team consisting of veterans from both the telecommunications and data communications industries. Investors include Mohr, Davidow Ventures, Crosspoint Venture Partners, Mayfield Fund and Canaan Partners.

About MCI WorldCom

MCI WorldCom is a global leader in communications services with 1998 revenues of more than \$30 billion and established operations in over 65 countries encompassing the Americas, Europe and the Asia-Pacific regions. MCI WorldCom is a premier provider of facilities-based and fully integrated local, long distance, international and Internet services. MCI WorldCom's global networks, including its state-of-the-art pan-European network and transoceanic cable systems, provide end-to-end high-capacity connectivity to more than 40,000 buildings worldwide. MCI WorldCom is traded on NASDAQ under WCOM. For more information on MCI WorldCom, visit the World Wide Web at <http://www.wcom.com>.

About Rhythms

Rhythms NetConnections Inc. is an Englewood, Colorado-based business with commercial services in San Diego, San Francisco, Oakland/East Bay, San Jose, Sacramento, Los Angeles, Orange County, Chicago, Boston, New York, Philadelphia, Washington, D.C., Detroit, and Denver. The company is a provider of networking solutions for businesses, using DSL technology to provide high-speed remote access to private networks and the Internet. Telecommunications services for Rhythms are provided by ACI, a wholly owned subsidiary of Rhythms. For more information, call 1-800-RHYTHMS, or visit the Web site at www.rhythms.net.

This news release may contain forward-looking statements that involve risks and uncertainties. Actual results may differ materially because of various risks. These risks include risks associated with the demand and competition for the services and products to be sold by Rhythms, the continued availability of adequate financing to support our activities, the timing of rollouts in additional regions, the number of potential customers who could access such services, and our dependence on third parties for services such as providing collocation and transmission facilities, providing marketing and sales efforts, and supplying and installing equipment. For an expanded discussion on these and additional risks associated with Rhythms' business, please see the documents filed by Rhythms NetConnections Inc. with the U.S. Securities and Exchange Commission.

SOURCE: Rhythms NetConnections Inc.

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Press Releases

Covad Successfully Executes Trials of Combined Voice and Data Over DSL

Contact:

Martha Sessums
Director of Corporate Communications
(408) 844-7508
msessums@covad.com

Nick Kormeluk
VP Investor Relations
(408) 844-7457
InvestorRelations@covad.com

Tom Crosby
The Mercer Island Group
(415) 241-7991
tom@fullcirclesolutions.com

Trials Demonstrate Toll-Quality Voice Calls Using DSL over ATM

ATLANTA - (BUSINESS WIRE) - June 7, 1999 - In a presentation at SuperComm by Chuck Haas, Co-Founder and Executive Vice President of Sales, Covad Communications (Nasdaq:COVD - news) today will announce successful technical trials of voice over its Digital Subscriber Line (DSL) service using asynchronous transfer mode (ATM) transport technology.

The trials have proven the technical capability of simultaneous data and voice service for up to 16 Plain Old Telephone Service (POTS) lines over a single DSL line. Covad has already successfully completed toll-quality voice calls over DSL lines via a Class 5 voice switch.

"When we founded the company in 1996, our original vision was to deliver combined voice and data solutions," Haas stated. "The marketplace continues to want cost-effective data and digital voice over one link, and this successful trial demonstrates our ability to deliver innovative products in this market. We hold a leading position in data and we intend to maintain that leadership in DSL voice."

"Covad's goal is to deliver a product with the same functionality of today's business-class telephone service," said Greg Wetzel, Covad's chief network architect and the Chair of the Voice over DSL Working Group of the ADSL Forum. "In one bold move, this trial has proven that our end-to-end ATM network provides the highest performance available."

The technology that Covad is developing is significant for several reasons. The solution not only combines digital voice and data in the local loop, but also provides the same quality and full functionality of today's telephone service, including all features such as caller ID and call forwarding. Moreover, as an access platform for both voice and data, DSL promises to enable more competition in the marketplace, breaking the local loop monopoly.

Current hardware vendors participating in the technology trials are Jetstream Communications, Inc. and CopperCom, Inc. In the technical trials both Jetstream and CopperCom integrated access devices (IADs) and gateways were connected via Covad's Nokia/Diamond Lane DSLAMs and Cisco 8600 BPX ATM switches to a Class 5 voice switch. In one phase of Covad's trials multiple simultaneous voice calls were made on each of several IADs while file transfers and web browsing occurred in parallel. In another phase, over 200,000 phone calls were generated over a weekend to demonstrate the performance and stability of the system. Through these exercises and others, the trials have proven the technical feasibility and robustness of a combined voice and data over DSL solution.

Covad is in discussions with potential partners to offer a voice over DSL Service. Covad plans to initiate market trials with customers in 1999. Originally designed to support both voice and data, Covad's voice services will utilize the existing network's digital subscriber line access multiplexer (DSLAM) and end-to-end ATM network infrastructure.

About Covad

Covad Communications Company is a leading high-speed Internet and network access provider offering DSL services through Internet Service Providers to small and medium businesses and consumers, and selling directly to large enterprise customers. Covad's service is on-line in 11 regions currently encompassing 26 metropolitan statistical areas. Service is available in the San Francisco Bay Area, Los Angeles, Seattle, Sacramento, New York, Boston, the Washington, D.C./Baltimore corridor, Chicago, Philadelphia, and San Diego metropolitan areas.

Covad has announced plans to deploy its networks in a total of 22 regions, encompassing 51 metropolitan statistical areas nationwide. Covad Communications Company and its affiliates doing business as Covad Communications Company, are wholly owned subsidiaries of Covad Communications Group, Inc. (Nasdaq:COVD - news). Corporate headquarters is located at 2330 Central Expressway, Santa Clara, CA, 95050. Telephone: 408-844-7500 or 1-888-GO-COVAD; FAX: 408-844-7501. Web Site: www.covad.com.

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995:

The statements contained in this release, which are not historical facts may be deemed to contain forward-looking statements, including, but not limited to, deployment of voice services over the existing network and the timing and breadth of service offerings in each region. Actual results may differ materially from those anticipated in any forward-looking statements as a result of certain risks and uncertainties, including, without limitation, the Company's dependence on strategic third parties to market and resell its services and provide equipment, intense competition for the Company's service offerings, dependence on growth in demand for DSL-based services, availability of collocation space and facilities, ability to manage and scale operations, scalability and speed of our network, ability to adapt existing and new technologies, and other risks and uncertainties detailed in the Company's Securities and Exchange Commission filings. The Company disclaims any obligation to update information contained in any forward-looking statements.

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Exhibit C



Technical Reference

Spectrum Management Guidelines for Unbundled Loops

DRAFT

TR 72675, Issue 1

December 1998

TR 72675, Issue 1, December 1998
DRAFT

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703-974- 5887

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Trone Bishop
6E
13100 Columbia Pike
Silver Spring, MD 20904
301-236-3754

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for Unbundled Loops**

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